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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,252

07/05/2006

Michael Bauer

I431.140.101/FIN 480 PCT

3329

25281

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07/07/2008

DICKE, BILLIG & CZAJA
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EXAMINER

AYCHILLHUM, ANDARGIE M

ART UNIT

PAPER NUMBER

2841

MAIL DATE

DELIVERY MODE

07/07/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/562,252	Applicant(s) BAUER ET AL.	
	Examiner ANDARGIE M. AYCHILLHUM	Art Unit 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-39 is/are pending in the application.
- 4a) Of the above claim(s) 28-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-27 and 36-39 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/23/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 11 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Baker et al. (US 5,869,896).

Pertaining to claim 11, Baker et al. discloses a first **(21)** (i.e. such as sensor array is a charge coupled device (**CCD**)) (see Baker et al. figures **13-14**) and a second component **(21)** with connection sides of the components **(21)**;

A wiring block **(27, 31)** (see Baker et al. figure 15) with contact pads **(29)** (column **5**, lines **10-35**) (see Baker et al. figures **13 and 14**) on its outer sides (see Baker et al. figures **13 and 14**) and with lines in its volume (the space between the metal lines 31, 27), the lines electrically connecting (column **3**, lines **36-49**) the contact pads **(29)** on the outer sides to one another according to a circuit layout, the first component **(21)** and the second component **(21, on the other side)** being arranged on different non-opposite outer sides (see Baker et al. figures **13 and 14**) of the wiring block **(27, 31)** and the connections being connected to the contact pads **(29)**.

Pertaining to claim 39, Baker discloses the contacts of the first (21) and second components (21) are flip-chip contacts (see figs. 13-14).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12-16, 25-27 and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al. (US 5,869,896) in view of Dourousseau (US 6,708,051 B1).

Pertaining to claims 12 and 25 Baker et al. discloses all limitation except the lines comprise carbonized plastic.

Dourousseau discloses lines comprise carbonized plastic (column 2, lines 3236)).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant (s) claimed invention was made to provide lines with carbonized plastic as taught by Dourousseau to wiring of a sensor assembly disclosed by Baker et

al. in order to provide flexible interconnected chain (interconnected by a cross bar) between the components.

Pertaining to claim 13-15, 26-27 and 37, Baker et al. as modified by Durousseau substantially teaches all the claimed invention except wherein the lines comprise nanoparticles with carbonized short circuit paths between the nanoparticles, including comprising wherein the lines comprise anisotropically oriented nanoparticles.

Therefore, It would have been obvious to one having ordinary skill in the art at the time the invention was made to the lines comprise nanoparticles with carbonized short circuit paths between the nanoparticles, including comprising wherein the lines comprise anisotropically oriented nanoparticles, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use for the interconnecting between the contact pads to be wired on the outer side of the wiring block without complication. In re Leshin, 125 USPQ 416.

Pertaining to claims 16, 36 and 38 Baker et al. as discloses a first **(21)** (i.e. such as sensor array is a charge coupled device (**CCD**)) (see Baker et al. figures **13-14**) and a second component **(21)** with connection sides of the components **(21)**;

A wiring block **(27, 31)** (see Baker et al. figure 15) with contact pads **(29)** (column **5**, lines **10-35**) (see Baker et al. figures **13 and 14**) on its outer sides (see Baker et al. figures **13 and 14**) and with lines in its volume (the space between the

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metal lines 31, 27), the lines electrically connecting (column 3, lines **36-49**) the contact pads (**29**) on the outer sides to one another according to a circuit layout, the first component (**21**) and the second component (**21, on the other side**) being arranged on different non-opposite outer sides (see Baker et al. figures **13 and 14**) of the wiring block (**27, 31**) and the connections being connected to the contact pads (**29**).

However Baker et al. does not disclose carbonized plastic.

Rudin discloses lines comprise carbonized plastic (column 1, lines **21-36**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant (s) claimed invention was made to provide lines with carbonized plastic as taught by Rudin to wiring of a sensor assembly disclosed by Baker et al. in order to provide energy supply line guiding chain that comprises flexible interconnected chain (interconnected by a cross bar) between the components.

5. Claim 17 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Baker et al. (US 5,869,896) in view of Agrawal et al. (US 5,644,496).

Pertaining to claim 17, Baker et al. discloses all limitations except vertical line routing, horizontal line routing, or line routing at different solid angles, thereby achieving reduced length wiring paths and reducing propagation time delays within the wiring block.

However, Agrawal et al. discloses vertical line routing (**32**), horizontal line routing (**31**), or line routing at different solid angles, thereby achieving reduced length

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wiring paths (column **7**, lines **38-60**) and reducing propagation time delays (column **7**, lines **19-37**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant (s) claimed invention was made to provide lines and wiring path and reducing propagation time delays as taught by Agrawal et al. to wiring of a sensor assembly disclosed by Baker et al. in order to transfer signal to their final destination.

6. Claims 18-24 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Baker et al. (US 5,869,896) in view of Andoh et al. (US 5,095,357).

Pertaining to claims 18-24, Baker discloses all limitations except the line routing is three-dimensional, configured spiral, sheet, as an electrical passive and inductive component.

However, Andoh et al. discloses the line routing is three-dimensional (column **9**, lines **26-34**), configured spiral (**2**) (see Andoh figure **2**), sheet (**31**) (column **7-8**, lines **1-19**), as an electrical passive (column **5**, lines **47-53**) and inductive component (i.e. such as passive component is inductive component).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant (s) claimed invention was made to provide the line routing is three-dimensional, configured spiral, sheet, as an electrical passive and inductive component

as taught by Andoh et al. to wiring of a sensor assembly disclosed by Baker et al. in order to transmit signals to their final destination.

Response to Arguments

Applicant's arguments filed 03/28/2008 have been fully considered but they are not persuasive.

Applicant argues "the wire 25 of Baker is not a wiring block for several reasons."

In response to the above argument, Applicant's attention respectfully directed to A wiring block (**27, 31**) (see Baker et al. figure 15).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andargie M. Aychillhum whose telephone number is (571) 270-1607. The examiner can normally be reached on (Mon-Fri from 8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dean A. Reichard/
Supervisory Patent Examiner, Art Unit 2841

A.A.
June 25, 2008